

**FINAL RULE TO REDUCE AIR TOXIC EMISSIONS FROM
INTEGRATED IRON AND STEEL MANUFACTURING FACILITIES**

TODAY'S ACTION

- ! The Environmental Protection Agency (EPA) is issuing a final rule to reduce emissions of toxic air pollutants from new and existing integrated iron and steel manufacturing facilities. Toxic air pollutants, or air toxics, are known or suspected to cause cancer and other health problems.
- ! Integrated iron and steel manufacturing facilities convert iron ore to iron and refine the iron to produce steel.
- ! Today's final rule focuses on reducing air toxics emitted from a number of points at integrated iron and steel facilities, including sinter plants that convert raw materials into an agglomerated product (sinter) that is used to fuel the blast furnace, blast furnaces that produce iron, and basic oxygen process furnace shops that produce steel .
- ! Facilities will be able to comply with the rule's requirements by installing air pollution control equipment to reduce emissions of metallic compounds such as manganese and lead and by instituting pollution prevention techniques to reduce emissions of organic compounds such as polycyclic organic matter, benzene, and dioxin/furans.
- ! The rule sets limits on emissions of particulate matter from control devices installed on process vents or stacks; and sets opacity limits for other emissions points. Opacity is a measurement of the darkness of gaseous emissions. Particulate matter and opacity are, more easily measured yet accurate substitutes, for air toxic emissions.
- ! Today's rule includes a number of monitoring requirements to ensure that air toxic emissions are reduced. Performance tests are also required at least twice during each 5-year permit term for a control device.
- ! Existing facilities must comply with this rule within 3 years after its publication in the *Federal Register*.

HEALTH AND ENVIRONMENTAL BENEFITS AND COSTS

- ! Today's rule will reduce toxic air emissions from 18 existing iron and steel plants located in ten states (most of which are in Region V) by about 67 tons per year. It will also reduce emissions

of particulate matter by 5,800 tons per year.

- ! The air toxics reduced include manganese and lead. Exposure to these compounds may cause cancer, central nervous system effects, kidney damage, and acute health disorders such as respiratory and skin irritation. Exposure to particulate matter can aggravate existing respiratory and cardiovascular disease and is associated with increased risk of premature death.
- ! EPA estimates the total annual costs for facilities to comply with the rule to be approximately \$16 million. These costs include adding or upgrading emission control systems, purchasing monitoring systems, monitoring, recordkeeping, and reporting. Air pollution control systems have been used for many years in this industry and only 6 of 18 plants will need to upgrade or install emission control systems to meet the final rule requirements.
- ! EPA estimates the economic impacts of the rule on both the industry and the U.S. market for steel mill products to be negligible. No significant adverse economic impacts are predicted as a direct result of this final rule, although some facilities are currently in bankruptcy proceedings and may close on their own accord.

BACKGROUND

- ! The Clean Air Act requires EPA to identify categories of industrial sources that emit one or more listed 188 toxic air pollutants.
- ! EPA's published list of source categories includes integrated iron and steel facilities.
- ! For major sources within each source category, the Clean Air Act requires EPA to develop standards that restrict emissions to levels consistent with the lowest-emitting (also called best-performing) sources.
- ! Major sources are those that emit 10 tons a year or more of a single toxic air pollutant or 25 tons a year or more of a combination of air toxics. .

FOR MORE INFORMATION

- ! To download a copy of the rule, go to EPA's World Wide Web site at <http://www.epa.gov/ttn/oarpg/> under newly proposed or issued rules.
- ! For further information about the final rule, contact Mr. Phil Mulrine of EPA's Office of Air

Quality Planning and Standards at (919) 541-5289 or mulrine.phil@epa.gov.

- ! EPA's Office of Air and Radiation's homepage on the Internet contains a wide range of information on the air toxics program, as well as many other air pollution programs and issues. The Office of Air and Radiation's home page address is: <http://www.epa.gov/oar/>.